

## DETAILED ACTION

### ***Response to Arguments***

1. Applicant's arguments, see Remarks, filed 4/6/08, with respect to the amended claims 59, 63, 68, and 72 have been fully considered and are persuasive. The rejections of the amended claims 59, 63, 68, and 72 have been withdrawn.

#### **Examiner Remarks:**

(a) Regarding the amended independent claims 59 and 68, the amended claims have overcome the prior art reference, Nakamura (US 6476505). See Office action mailed on 1/8/08.

However, during the interview between the Applicant and the Examiner on 4/4/08 (see Interview Summary mailed on 4/8/08), The Examiner identified a prior art reference, Washino (US 5484963), that the amended claims 58 and 68 will have to also overcome not just only Nakamura.

(b) Regarding claims 63 and 72, the reference Washino was the primary reference (see Office action mailed on 1/8/08).

(c) The reference Washino is now the primary reference and the arguments with respect to this reference is persuasive. The Examiner agrees with the Applicant that it is unreasonable to rotate the attachment pads of Washino by 90 degrees since such rotation will teach away from what taught by Washino (Washino repeatedly mentions in the disclosure and further claims that the pad has an elongated shape elongating in a radial direction extending from a predetermined point, thus reorienting the pads would teach away from Washino).

**EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with the Applicant, Gabe Cherian, on 6/3/08.

The application has been amended as follows:

Claim 59 (Currently amended): A substrate and attachment pad assembly comprising:

a substrate having a planar side surface; and

an array of attachment pads for constituting connecting elements[,] formed on said planar side surface of said substrate;

wherein each one of said attachment pads[,] has an elongated shape and elongating in a direction that is substantially perpendicular to a respective individual ray rays, each such ray extending from a predetermined focal point on said planar side surface of said substrate to substantially the center of each respective pad of said attachment pads pad;

or in other word, said each one of said attachment pads is arranged so as to have its short axis in a direction which extends radially from a predetermined focal point on said planar side surface of said substrate to substantially the center of each respective pad of said attachment pads pad.

Claim 63 (Currently Amended): A substrate and attachment pad assembly comprising:

a substrate having a planar side surface; and  
an array of attachment pads formed on said planar side surface of said substrate for connection with terminals of a mounting article which is to be mounted on said substrate;

wherein each one of said attachment pads, when observed in a plan view, has an elongated shape and elongating in a direction that is substantially perpendicular to a respective individual ray [.] extending from a focal point which is located substantially at the center of said array of said attachment pads to a point near the center of said attachment pad with respect to its shape observed in a plan view;

or in other words, each one of said attachment pads, when observed in a plan view, has its short axis in a direction which extends radially from a focal point which is located substantially at the center of said array of said attachment pads to a point near the center of said attachment pad with respect to its shape observed in a plan view.

Claim 68 (Currently Amended): A substrate and attachment pad assembly comprising:

a substrate having a planar side surface; and  
an array of attachment pads for constituting connecting elements[.] formed on said planar side surface of said substrate;

wherein each one of said attachment pads has an elongated shape and arranged so as to have its long axis extend in a direction directions that are is substantially

perpendicular to a respective individual ray reys, each said ray extending from a predetermined focal point on said planar side surface of said substrate to substantially the center of said attachment pad;

or in other words, said each one of said attachment pads being arranged so as to have its short axis extend radially from a predetermined focal point on said planar side surface of said substrate to substantially the center of said attachment pad.

Claim 72 (Currently Amended): A substrate and attachment pad assembly comprising:

a substrate having a planar side surface; and

an array of attachment pads formed on said planar side surface of said substrate for connection with a mounting article which is to be mounted on said substrate;

wherein each one of said attachment pads, when observed in a plan view, has an elongated shape and arranged so as to have its long axis extending in a direction that is substantially perpendicular to an individual ray, said individual ray extending radially from a focal point which is located substantially at the center of said array of said attachment pads to substantially the center of said attachment pad;

or in other words, the short axis of each one of said attachment pads, when observed in a plan view, is oriented in a radial direction extending from a focal point which is located substantially at the center of said array of said attachment pads to substantially the center of said attachment pad.

Claim 79 (currently amended): An assembly according to claim 59, wherein said predetermined focal point on said planar side surface of said substrate is a fixed point with respect to said attachment pads in-space.

Claim 83 (currently amended): An assembly according to claim 68, wherein said predetermined focal point on said planar side surface of said substrate is a fixed point with respect to said attachment pads in-space.

Claim 87 (currently amended): An assembly according to claim 63, wherein said focal point on said planar side surface of said substrate is a fixed point with respect to said attachment pads in-space.

Claim 91 (currently amended): An assembly according to claim 72, wherein said focal point on said planar side surface of said substrate is a fixed point with respect to said attachment pads in-space.

***Allowable Subject Matter***

3. Claims 59-92 are allowed.

***Reasons for allowance***

4. The following is an examiner's statement of reasons for allowance: The examiner agrees with the applicant's remarks that there is no reasonable motivation to rotate the attachment pads of the primary reference, Washino (US 5484963), since rotating Washino's attachment pads by 90 degrees would end up teaching away from the disclosed structure of Washino.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOA C. NGUYEN whose telephone number is (571)272-8293. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dean A. Reichard/  
Supervisory Patent Examiner, Art Unit 2841

Hoa C. Nguyen